

*coli*; should codon usage be suboptimal, one can employ the *B. subtilis* orthologs (discussed above).--

Support for this paragraph is found in the application on page 86, lines 14-20.

Please delete all of page 87.

Please insert the following paragraph on page 92 of the specification, at line 9:

--This application also incorporates by reference US provisional patent applications Serial Nos. 60/161,414, filed 25 Oct. 1999, and 60/206,082, filed 18 May 2000, both now lapsed.--

Support for this amendment can be found on page 1, lines 6-8.

**In the Claims:**

1. (Twice Amended) A recombinant *E. coli* host cell comprising one or more expression vectors that comprise

methylmalonyl CoA mutase genes mutA and mutB from either *Propionibacterium shermanii* or *Streptomyces cinnamomensis*, and

a *Propionibacterium shermanii* epimerase gene,

wherein said genes produce enzymes capable of making S-methylmalonyl CoA required for biosynthesis of a polyketide produced by a modular polyketide synthase (PKS) expressed from a PKS gene or genes in said host cell,

said PKS gene or genes contained in a vector that replicates extrachromosomally or is integrated into chromosomal DNA,

wherein said host cell, in the absence of said expression vectors, is unable to make said polyketide due to lacking all or a part of a biosynthetic pathway required to produce S-methylmalonyl CoA.

24. (Twice Amended) An *E. coli* host cell that expresses

methylmalonyl CoA mutase genes mutA and mutB from either *Propionibacterium shermanii* or *Streptomyces cinnamonensis*, and

a *Propionibacterium shermanii* epimerase gene,

wherein said mutase and epimerase genes produce enzymes capable of making S-methylmalonyl CoA, and

said host cell further expresses a modular polyketide synthase (PKS) gene or genes,

said PKS gene or genes contained in a vector that replicates extrachromosomally or is integrated into chromosomal DNA.

28. (Amended) The host cell of Claim 1, wherein said methylmalonyl CoA mutase genes are *Propionibacterium shermanii* methylmalonyl CoA mutase genes mutA and mutB.

29. (Amended) The host cell of Claim 1, wherein said methylmalonyl CoA mutase genes are *Streptomyces cinnamonensis* methylmalonyl CoA mutase genes mutA and mutB.

30. (Amended) The host cell of Claim 1, wherein one or more of said genes is under control of a promoter from an *E. coli* gene.

31. (Amended) The host cell of Claim 1, wherein said PKS is 6-deoxyerythronolide B synthase.

32. (Amended) The host cell of Claim 17, wherein said methylmalonyl CoA mutase genes are *Propionibacterium shermanii* methylmalonyl CoA mutase genes mutA and mutB.

33. (Amended) The host cell of Claim 17, wherein said methylmalonyl CoA mutase genes are *Streptomyces cinnamonensis* methylmalonyl CoA mutase genes mutA and mutB.

34. (Amended) The host cell of Claim 17, wherein one or more of said genes is under control of a promoter from an *E. coli* gene.

35. (Amended) The host cell of Claim 17, wherein said PKS is 6-deoxyerythronolide B synthase.

36. (Amended) The host cell of Claim 24, wherein said methylmalonyl CoA mutase genes are *Propionibacterium shermanii* methylmalonyl CoA mutase genes mutA and mutB.

37. (Amended) The host cell of Claim 24, wherein said methylmalonyl CoA mutase genes are *Streptomyces cinnamonensis* methylmalonyl CoA mutase genes mutA and mutB.

38. (Amended) The host cell of Claim 24, wherein one or more of said genes is under control of a promoter from an *E. coli* gene.

39. (Amended) The host cell of Claim 24, wherein said PKS is 6-deoxyerythronolide B synthase.

Please cancel claim 40 without prejudice or disclaimer.

**In the Drawings:**

Please add attached Figures 2-9 after Figure 1 on the last page of the present application.